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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,591	12/27/2004	Christian Jansen	19357-099934	9493

7590 06/10/2008  
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EXAMINER
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IRVIN, THOMAS W

ART UNIT	PAPER NUMBER
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3683

MAIL DATE	DELIVERY MODE
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06/10/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/519,591	<b>Applicant(s)</b> JANSEN ET AL.	
	<b>Examiner</b> THOMAS W. IRVIN	<b>Art Unit</b> 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 20-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20041227</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Species A (Fig. 2) in the reply filed on March 27, 2008 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 20-30 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitation "said second flange" in line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monahan et al. (US 6,394,248) in view of Hungerford et al. (2,885,896).

In Re claim 1, Monahan discloses a decoupler assembly comprising: a hub (17) configured to be fixedly assembled to the shaft (14), said hub including a first slot (see Figs. 8 and 9), understood to meet the limitation of a helical slot, formed therein; a carrier (16) rotatably mounted on said hub, said carrier including a second slot (see Fig. 6 and 7), understood to meet the limitation of a helical slot, formed therein; a helical compression spring (33) extending between a hub end and a carrier end (see Fig. 3) for transferring torque between said hub and carrier, wherein said hub end is retained in said helical first slot to prevent relative movement between said hub end of said compression spring and said hub, and said carrier end is retained in said helical second slot to prevent relative movement between said carrier end of said compression spring and said carrier; a pulley (18) rotatably coupled to said hub, said pulley having an outer periphery configured to frictionally engage with a drive belt (12), said pulley having an inner surface formed therein; a clutch spring (22) fixedly secured to said carrier and having a plurality of helical coils frictionally engaging with said inner surface of said pulley to selectively couple said hub and pulley, said compression spring and said

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clutch spring are wound in opposite senses in that said clutch spring to expand into gripping engagement with said inner surface during acceleration of said pulley relative to said hub and to contract out of gripping engagement with said inner surface during deceleration of said pulley relative to said hub. Monahan et al. fail to teach a helical first spring.

Hungerford et al. teach including two helical torsion springs (L,M) (see top of Fig. 2) engaged with a pulley (J), hub (18), carrier (H), and shaft (7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the hub and carrier spring engagement of Monahan et al. to use a single helical torsion spring, as taught by Hungerford et al., as a matter of design choice to simplify the design of the engagement, as doing so would obviate the need for the multiple compression springs and multiple slots to hold the springs.

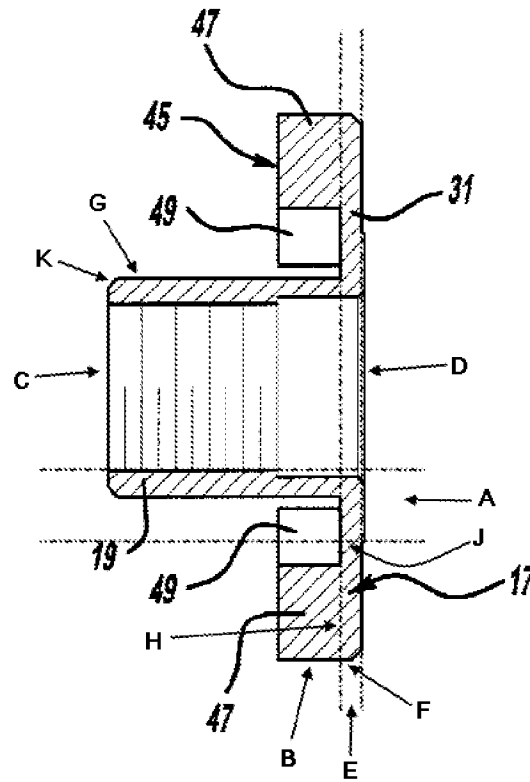


Fig. 8 (US 6,394,248)

In Re claim 2, see body (A) in Fig. 8 shown above.

In Re claim 3, see cylindrical outer surface (G) which is between first and second ends (C and D).

In Re claim 4, see flange, shelf (47), and outer flange surface (B). Examiner notes that in the apparatus, as modified, there would only need to be a single slot formed by the shelf.

In Re claim 5, see second flange (E) and annular surface extending radially between said body and said outer flange surface (H). Examiner notes that in the apparatus, as modified, there would only need to be a single slot formed by the shelf.

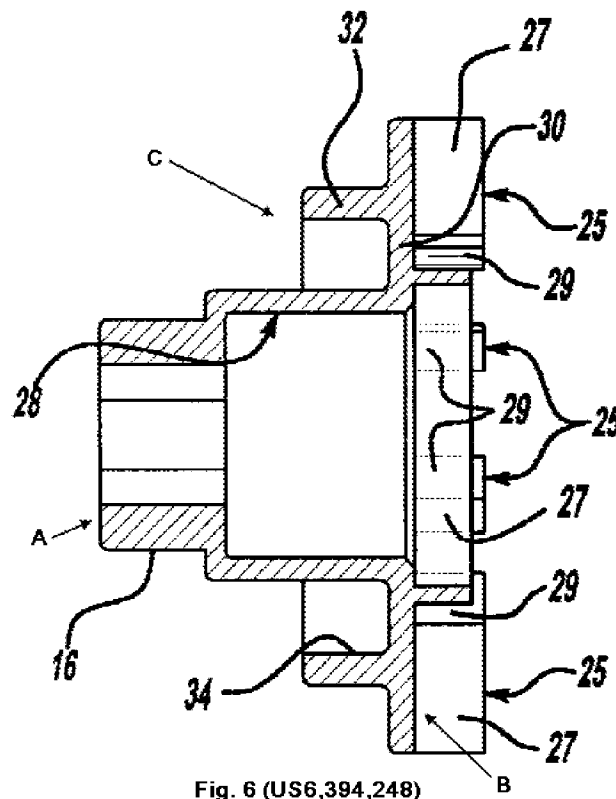
In Re claim 6, in the apparatus of Monahan et al. as modified, the helical first slot is formed by the annular surface (H) and the flange (47) for retaining therein said hub

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end of said torsion spring for preventing relative movement between said hub end of said torsion spring and said hub.

In Re claim 7, the hub includes a reduced diameter portion (19) having an outer mounting surface (G) having a smaller diameter than said body of said hub (J).

In Re claim 8, see abutment surface (K) extending radially between said body and said outer mounting surface.



**Fig. 6 (US6,394,248)**

In Re claim 9, with reference to Fig. 6 above, the carrier is ring shaped and extends axially between opposite first and second sides (A and B).

In Re claim 10, in the apparatus as modified, the helical second slot is formed in said second side (B) of said carrier for retaining therein said carrier end of said torsion spring for preventing relative movement between said carrier end of said torsion spring

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and said carrier. Examiner notes that in the apparatus, as modified, there would only need to be a single slot formed by the shelf (25).

In Re claims 11 and 12, the clutch spring extends between a hooked proximal end (C) and an opposite distal end (A) (see Fig. 2).

In Re claim 13, the examiner takes official notice that it is common to make springs of a steel material.

In Re claim 14, see clutch spring (22) in Fig. 2.

In Re claim 15, see bearing (20).

In Re claim 16, a first and second lubricant are used, one for the bearing (see col. 7, lines 1-10), and one for the clutch spring (see col. 9, lines 36-41).

In Re claim 17, the bearing member includes a ball bearing assembly having an inner race (46) engaging said hub through the carrier (16) and an outer race (48) engaging said pulley (see Fig. 2). Examiner notes that the claim does not specify that the inner race of the bearing is fixedly coupled to the hub.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS W. IRVIN whose telephone number is (571)270-3095. The examiner can normally be reached on Mon-Fri 8am-4pm, Alt Fri off (EST).



If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Siconolfi can be reached on (571) 272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas W. Irvin/  
Examiner, Art Unit 3683

/Robert A. Siconolfi/  
Supervisory Patent Examiner, Art Unit

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